U.S. Patent Application Serial No. 10/579,166

Amendment dated September 30, 2010

Reply to Office Action of March 30, 2010

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

- 1. (Currently amended) A physical process causing the effect of preserving meat throughout long periods of time, tens of months, thus preserving the properties of a fresh product, wherein said process comprises the following steps:
 - a) Cutting the meat <u>and immediately subjecting the cut meat to an initial</u>

 quick freezing process of the type IQF to form a meat product, wherein the temperature
 reaches around -5°C in the center of a meat piece in a maximum of 1.5 hours;
 - b) Subjecting the meat to an initial quick freezing process of the type IQF, wherein the temperature reaches around -5°C in the center of a meat piece in a maximum of 1.5 hours;
 - [[c]]b) Packaging the meat product in special packages, which possess high impermeability to gases, basically oxygen, nitrogen and carbon anhydride, as well as to water vapor, and are at the same time highly resistant both to physical stress and to a wide range of temperatures from -60 to 100°C, wherein they can endure sealing temperatures in the range form +130 to +200°C;
 - [[d]]c) Subjecting the packed product to a high vacuum process, wherein the high vacuum comprises a 99% vacuum;
 - [[e]]d) Continuing the quick freezing of step ([[d]]c) from around -5°C to reach a temperature of around -18°C in the center of a meat piece in a maximum of 2 hours including the packaging time;
 - [[f]]e) Keeping the packed product at low and uniform temperatures around 18°C, in resistant plastified cardboard boxes, using pile-up systems if said boxes are not auto-supportive; and

U.S. Patent Application Serial No. 10/579,166 Amendment dated September 30, 2010 Reply to Office Action of March 30, 2010

- [[g]]f) Using the treated product by taking it out from the freezing chambers or freezers and subjecting it to defrosting, ready to be consumed in 1 to 3 days by treating it as a fresh product.
- 2. (Previously presented) A physical process causing the effect of preserving meat food throughout long periods of time according to claim 1, wherein said package comprises materials which have a high impermeability to gases, water vapor, and many diverse type of odorants.
- 3. (Currently amended) A physical process causing the effect of preserving meat food throughout long periods of time according to claim 1, wherein said step ([[c]]b) is carried out using facilities or equipments to produce high vacuum, using materials that fulfill the general requirements indicated in said step ([[c]]b) of claim 1, wherein the permeabilities to gases, water vapor and temperature resistances are located between the limits set forth in the following table:

Permeability to gases			Permeability to	Temperature	Sealing
$(cm^3/m^2 - 24h, -bar,$			water vapor	resistance (°C)	temperature (°C)
at 75% relative humidity)			(g/m ² - 24 h		
			at		
			20°C – 85%		
			relative		
			humidity)		
Oxygen	Carbonic	Nitrogen			
	anhydride				
4 to 10	12 to 30	1.3 to 5	1.0 to 1.6	-60 to +100	+130 to +200

4. (Currently amended) A physical process causing the effect of preserving meat food throughout long periods of time according to claim 1, wherein said step ([[c]]b) uses materials that do no transmit odors and flavors independently of the temperatures to which they are subjected in this process; such materials being highly resistant, both to physical stress and to a

U.S. Patent Application Serial No. 10/579,166

Amendment dated September 30, 2010

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wide range of temperatures; such materials being also flexible enough to be able to adapt to surfaces of diverse shapes and textures, including soft and sharp edges, in the context of typical requirements in a high vacuum process.

- 5. (Currently amended) A physical process causing the effect of preserving meat food throughout long periods of time according to claim 1, wherein said steps ([[b]]a) to ([[e]]d) are carried out together in a single ad hoc industrial facility, maintaining the specified sequence.
- 6. (New) A physical process causing the effect of preserving meat food throughout long periods of time according to claim 1, wherein the meat is fish.